

## **SOUTH DAYTON DUMP & LANDFILL**

**EPA ID# OHD980611388**

Last Updated: June, 2012

### **Site Description**

The South Dayton Dump & Landfill is an old industrial landfill located at 1975 Dryden Road in Moraine, Ohio. Previous United States Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (Ohio EPA) reports indicate the landfill is 25 acres, but more recent information indicates the landfill is 80 acres. About 40 acres of the landfill has been built over and/or is being used for other commercial/industrial purposes.

The landfill operated from 1941 to 1996 and is a filled sand and gravel pit. The landfill contains drums, metal turnings, fly ash, foundry sand, demolition material, wooden pallets, asphalt, paint, paint thinner, oils, brake fluids, asbestos, solvents, transformers and other industrial waste. As the extracted areas of the site were filled, some of the the property was sold and/or leased to businesses including Valley Asphalt and other businesses along Dryden Road and East River Road. The Miami Conservancy District owns the southern part of the site including part of the large quarry pond. The owners of the remaining undeveloped areas of the landfill would like to develop these areas of the site for commercial and/or industrial use.

The landfill is located near the Great Miami River and is separated from the river by about 350 feet of flat open land and the Great Miami River Recreation Trail. Seven residences are within 200 feet of the landfill along East River Road and a trailer park is 200 feet from the landfill east of Dryden Road. Part of the landfill is within the 100 year floodway and more than half of the landfill is within the 100 year floodplain. The landfill is within a secondary wellhead protection area and there is a well (not used for drinking water) in the northern part of the landfill. The site also contains a federally designated wetland. Some of the landfilled materials are below the water table and are in direct contact with groundwater.

### **Site Responsibility**

This site is being addressed by potentially responsible parties under federal and state oversight.

### **Threats and Contaminants**

Soil contains metals including lead, copper, antimony, arsenic, barium, beryllium, cadmium and mercury; and organic compounds including polychlorinated biphenyls, trichloroethene, tetrachloroethene and polynuclear aromatic hydrocarbons. Groundwater contains vinyl chloride, trichloroethene, 1,2-dichloroethene, arsenic, lead and other chemicals. Sediment in the water-filled gravel pit contains polychlorinated biphenyls, polynuclear aromatic hydrocarbons and pesticides. Sediment in the adjacent Great Miami River contains polychlorinated biphenyls, polynuclear aromatic hydrocarbons, pesticides and mercury. Landfill gas contains

methane, trichloroethene and other volatile organic compounds. Indoor air in many of the buildings over the landfill also contains trichloroethene.

### **Cleanup Progress**

U.S. EPA conducted a screening site inspection of the landfill in 1991 and a focused site inspection prioritization site evaluation in 1995. Ohio EPA conducted a site team evaluation prioritization of the landfill in 1996. In 2002 U.S. EPA conducted an aerial photographic analysis of the site.

In 2000 Valley Asphalt removed several drums and 2,217 tons of contaminated soils from their property that was uncovered when a sewer line was being excavated. U.S. EPA proposed the site to the National Priorities List in 2004.

In 2006 several potentially responsible parties for the contamination agreed to conduct further studies and evaluate cleanup options at the site. This work is called a remedial investigation/feasibility study and is being conducted under an administrative settlement agreement and order on consent with U.S. EPA. The potentially responsible parties' remedial investigation/feasibility study work plans were deficient and were not approved by U.S. EPA. In 2008, the potentially responsible parties agreed to conduct a streamlined remedial investigation/feasibility study at the site. U.S. EPA approved the potentially responsible parties' work plans, and the potentially responsible parties conducted several investigations at the site from 2008-2010.

The 2008-2010 investigations included geophysical surveys, test pit and test trench sampling, vertical aquifer sampling, landfill gas sampling and groundwater monitoring well installation and sampling. Based on the investigations, the potentially responsible parties agreed to divide the site work into two parts. Operable unit one will involve evaluating cleanup alternatives to address 55 acres of the landfill, and will include cleanup alternatives that will allow on-site business to remain safely operating at the site.

The potentially responsible parties submitted draft remedial investigation/feasibility study reports for the site in May 2010 and January 2011. The reports were inadequate and were disapproved by U.S. EPA. The potentially responsible parties submitted a revised report for operable unit one in June 2011. U.S. EPA did not agree with the report and is working with a contractor to modify the report to address U.S. EPA and Ohio EPA comments on the report. Once the report is finalized, U.S. EPA will propose a cleanup plan for this part of the site and expects to select a final remedy for this area by March 2013. After U.S. EPA selects a final cleanup plan, U.S. EPA will begin negotiating with the potentially responsible parties on the legal agreements for designing, constructing and monitoring this part of the remedy.

Operable unit two will involve more detailed investigations of the landfill materials in remaining site areas, surface water and sediment in the on-site Quarry Pond and the Great Miami River, floodplain soils, and on and off-site groundwater. U.S. EPA expects

to start working with the potentially responsible parties on the data quality objectives process for this work, and to have a work plan for the operable unit work in 2012.

The potentially responsible parties are also conducting a vapor intrusion study, to evaluate whether landfill chemicals are posing immediate threats to the on and near-site businesses. Based on sampling conducted in January and March 2012, vapor mitigation will be required at five businesses. U.S. EPA and Ohio EPA are working with the potentially responsible parties to evaluate mitigation options for these buildings. Additional vapor intrusion sampling will be conducted in July 2012.

**Contacts**

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